# **Significant Deficiencies**

#### for

## Community (CWS) & Non-Transient, Non-Community (NTNC) PWS

#### Source

- 1. Well near source of fecal contamination (ex. septic systems, sewer lines)
  - Septic systems, sewer lines, or other contaminant sources close to well/spring
  - Well head not sealed
  - Column/casing vent not screened
  - Hose bib faucet prior to check valve
  - Abandoned holes not properly sealed
- 2. Well in flood zone (100 year)
- 3. Improperly constructed well (ex. not properly grouted)
  - Well not grouted according to MSDH requirements
  - Well casing is compromised
  - Well screen is compromised
- 4. Spring boxes that are poorly constructed and/or are subject to flooding

### **Treatment**

- 1. Inadequate application of treatment chemicals and techniques (Both Primary MCLs and treatment necessary to satisfy state regulations)
  - Disinfection
  - Corrosion control
  - THM/precursor removal
  - Inorganic removal
  - Other MCL related
  - Inadequate application of treatment chemicals
- 2. Lack of redundant mechanical components where treatment is required -
  - If a system has only one source, then they must have two separate treatment trains such as two separate booster pumps/chlorinators or two solution pumps.
- 3. Unprotected cross-connections within treatment system
- 4. Inadequate monitoring

(Both Primary MCLs and monitoring associated with State Regulations)

- Inadequate disinfection or CT
- Inadequate monitoring of disinfection residual
- Inadequate operation/maintenance of treatment monitoring equipment
- Inadequate treatment monitoring equipment
- Inadequate records of treatment parameter sampling

#### **Distribution Systems**

- 1. Negative pressure that could result in contamination -
  - Pressure gauge or logger data indicating sustained low pressures on the distribution main
  - Hydraulic model output showing negative pressure areas in the system.
- 2. Inadequate disinfectant residual monitoring
  - System not flushed periodically
- 3. Unprotected cross-connections
  - System not surveyed for cross connections
  - Devices not tested as required by Law
  - Failing devices not repaired/replaced and retested

## **Finished Water Storage**

- 1. Inadequate internal cleaning/maintenance of storage tanks
  - tank not inspected periodically
  - recommended actions of inspection not completed in a reasonable time
- 2. Improper screening of overflow pipes, drains, or vents
- 3. Necessary repairs of storage tank roofs or covers not made

## **Pumps/Pump Facilities and Controls**

- 1. Inadequate pump capacity
- 2. Inadequate maintenance
- 3. Inadequate/inoperable control system

#### Monitoring/Reporting/Data Verification

- 1. Not monitoring according to site sampling plan or monitoring plan
- 2. Not meeting reporting requirements
- 3. Improper recordkeeping

### **Water System Management/Operation**

- 1. Failure to meet water supply demands (overloaded by serving greater than 100% capacity)
- 2. No approved emergency response plan or vulnerability analysis (updated annually)

- 3. Inadequate follow-up on previous deficiencies
- 4. Inadequate security measures
  - No updated vulnerability analysis
  - No updated emergency plan
  - Inadequate fencing of wells, tanks, pump stations, etc.
  - All vulnerable facilities not secured/locked

## **Operator Compliance with State Requirements**

- 1. Operator is not qualified as required by the State
- 2. Lack of required operator training